

a magnetic force line [formation means for forming] generator that generates magnetic force lines having portions roughly parallel to center axis of said discharge electrode, such that the length of said parallel portions becomes longer the closer said magnetic force lines are to said center axis; and

two walls positioned so as to sandwich said plasma generation region between them, in dimension of said center axis of said discharge electrode, for defining the scope of said plasma generation region in said center axial dimension, wherein said magnetic force lines that pass through a center of said plasma generation region are shaped so that they do not intersect said two walls.

3. (Amended) The plasma generation apparatus according to [Claim] claim 2, further comprising:

a second high-frequency electric power [application means for applying] applicator that applies high-frequency electric power to one of said two walls.

7. (Amended) The plasma generation apparatus according to [Claim] claim 3, wherein said first high-frequency electric power [application means] applicator comprises a first high-frequency electric power supply [for outputting] that outputs said high-frequency electric power applied to said discharge electrode and said second high-frequency electric power [application means] applicator comprises a second high-frequency electric power supply [for outputting] that outputs said high-frequency electric power applied to one of said two walls.

8. (Amended) The plasma generation apparatus according to [Claim] claim 3, wherein said first high-frequency electric power [application means] applicator comprises a high-frequency power supply [for outputting] that outputs the high-frequency electric power applied to said discharge electrode; and said second high-frequency electric power [application means] applicator comprises a high-frequency resonant circuit [for resonating] that resonates with the high-frequency electric power output from said high-frequency electric power supply.

10. (Amended) The plasma generation apparatus according to [Claim] claim 1, further comprising:

a [control means for controlling] controller that controls magnitude of high-frequency electric power applied to said discharge electrode from said first high-frequency electric power [application means] applicator.

Claim 11, line 2, change "control means for controlling" to --a controller that controls--.

Claim 12, line 2, change "control means are" to --controller is--.

line 4, delete "effect said control so that".

Claim 13, line 2, change "control means for controlling" to --a controller that controls--.

Claim 14, line 2, change "position adjustment means for adjusting" to --a position adjuster that adjusts--.

16. (Twice Amended) A plasma generation apparatus comprising:
a vacuum vessel having a plasma generation region established in the interior thereof;

a gas [induction means for inducing] inductor that inducts discharge gas into said interior of said vacuum vessel;

an exhaust [means for exhausting] that exhausts the atmosphere in the interior of said vacuum vessel;

a [cylindrical] tube-shaped discharge electrode fashioned so as to enclose said plasma generation region;

a first high-frequency power [application means for applying] applicator that applies high-frequency electric power to said discharge electrode;

a magnetic force line [forming means] generator that [form] generates magnetic force in said plasma generation region;

two walls, formed of a substance exhibiting electrical conductivity, and positioned so as to sandwich said plasma generation region between them, in dimension of said center axis of said discharge electrode, for defining the scope of said plasma generation region in said center axial dimension, wherein a substrate is located between said two walls; and

a second high-frequency electric power [application means for applying] applicator that applies high-frequency electric power to at least one of said two walls.

Please add new claims 17 and 18.

--17. A plasma generation apparatus comprising:

a vacuum vessel having a plasma generation region established in the interior thereof;

a gas inductor that inducts discharge gas into said interior of said vacuum vessel;

an exhaust that exhausts the atmosphere in the interior of said vacuum vessel;
a tube-shaped discharge electrode fashioned so as to enclose said plasma generation region;

a first high-frequency electric power applicator that applies high-frequency electric power to said discharge electrode;

a magnetic force line generator that generates magnetic force lines having portions roughly parallel to center axis of said discharge electrode, such that the length of said parallel portions becomes longer the closer said magnetic force lines are to said center axis; and

two electrodes positioned so as to sandwich said plasma generation region between them, in dimension of said center axis of said discharge electrode, wherein said magnetic force lines that pass through a center of said plasma generation region are shaped so that they do not intersect said two electrodes.--

--18. A plasma generation apparatus comprising:

a vacuum vessel having a plasma generation region established in the interior thereof;

a gas inductor that inducts discharge gas into said interior of said vacuum vessel;

an exhaust that exhausts the atmosphere in the interior of said vacuum vessel;
a tube-shaped discharge electrode fashioned so as to enclose said plasma generation region;

a first high-frequency power applicator that applies high-frequency electric power to said discharge electrode;

a magnetic force line generator that generates magnetic force in said plasma generation region;

two electrodes, formed of a substance exhibiting electrical conductivity, and positioned so as to sandwich said plasma generation region between them, in dimension of said center axis of said discharge electrode, wherein a substrate is located between said two electrodes; and

a second high-frequency electric power applicator that applies high-frequency electric power to at least one of said two electrodes.--